

REMARKS:

The present application sets forth claims 1-20, of which claims 1, 6, 11, and 16 are independent claims. Original claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,161,074 (Stern) in view of U.S. Patent No. 6,178,418 B1 (Singer). In view of the present amendments and the following remarks, Applicants respectfully traverse such rejection and request reconsideration thereof.

Applicants submit that all elements of independent claims 1 and 6 as presently amended are not disclosed singularly or in combination of the Stern and Singer references. Original claim 1 has been amended herein to more particularly set forth a means for loading searchable data into at least one data mart, wherein the at least one data mart comprises a fact table surrounded by a plurality of dimensional tables coupled thereto in a star configuration. Similarly, original claim 6 has been amended herein to more particularly set forth the step of loading searchable data into at least one data mart characterized by a fact table surrounded by dimensional tables coupled thereto in a star configuration.

By loading the searchable (i.e., transformed) data of the decision support system of claims 1 and 6 into data marts, the information available for research is focused on particular topics, thus offering advantages over conventional SQL-type generic query language systems. Since the data marts contain only specific subsets of a production database, they are generally smaller and easier to manage. Data can then be structured in a way that suits the needs of an analyzing user, which then simplifies research and dramatically reduces response times. Further information accessibility is facilitated by the fact that the data marts are organized in a star scheme, corresponding to a generally larger fact table that is surrounded by and coupled to a plurality of dimensional tables. The fact tables contain the data to be analyzed, while the dimensional tables provide the selected criteria.

Although Stern discloses some aspects of information management, such reference does not apparently disclose loading/storing of information in the particular data mart based table structure set forth in presently amended claims 1 and 6. Singer, although disclosing the potential employment of a data mart, does not disclose the storage of data in star configured fact and

dimensional table configuration. Furthermore, all “queried data” in Singer is not stored in dedicated data marts, but resides on several different servers or at distributed data storage locations. Elaborate interaction is then required among client computers, connection drivers, query servers, and physical servers to determine where required query data is located and then proceeding with a multi-step relay of information. More particularly, the dedicated query server provides a logic server with virtual tables that function merely as pointers to other data supplying sources. “Importantly, each virtual table does not actually store data information” (see column 7, lines 13-14).

Applicants submit that all elements of present claims 1 and 6 are not disclosed singularly or in combination of the Stern and Singer references. Therefore, such references cannot by law serve to support an obviousness rejection under 35 U.S.C. §103(a). Based on the present amendments and the above remarks, Applicants respectfully submit that claims 1 and 6 are in condition for allowance, and acknowledgement of the same is earnestly solicited. Furthermore, since claims 2-5 and 7-10 variously depend from otherwise allowable respective claims 1 and 6 and further limit same, Applicants submit that all claims 1-10 are in condition for allowance.

Applicants submit that all elements of independent claims 11 and 16 as presently amended are not disclosed singularly or in combination of the Stern and Singer references. Original claims 11 and 16 have been respectively amended to more particularly set forth that the subject decision support system is applied to calling card applications. In claims 11 and 16, aspects related to the acquisition of system data now set forth that the respective logic and input mechanism are for acquiring calling card system data, and aspects related to transformation of the system data now set forth that the respective logic and transformation mechanism are for transforming the calling card data into searchable billing-related and customer usage data.

Providing a decision support system with this particular type of searchable data (i.e., calling card data concerning billing data and customer usage data) affords a great amount of versatility and utility in the respective query and summary features of the subject decision support system. For example only, if desired, and if so embodied, queries could be performed to study record amounts by various customer usage attributes such as activation/deactivation data,

customer edge, gender, price group, geographic region, credit rating, etc. An exemplary query on customer usage data, if desired, and if so embodied, could determine service popularity by performing a query that maps the total call volume by service, rate plan and activation date. Billing-related data can also be researched to determine such exemplary information as rate plans for a calling card, activation, deactivation, dates of calling card plan, the service of a calling card plan, and other call record attributes such as type, cgi, market call date and time, etc. An exemplary query on billing-related data, if desired, and if so embodied, could evaluate geographic usage load by performing a query that maps the total call volume by geographic region and date/time of call.

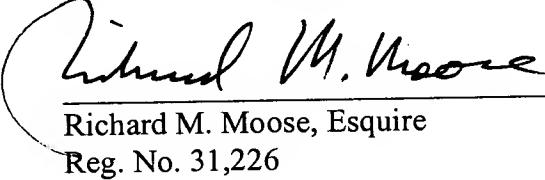
Applicants submit that all elements of present claims 11 and 16 are not disclosed singularly or in combination of the Stern and Singer references. Therefore, such references cannot by law serve to support an obviousness rejection under 35 U.S.C. §103(a). Based on the present amendments and the above remarks, Applicants respectfully submit that claims 11 and 16 are in condition for allowance, and acknowledgement of the same is earnestly solicited. Furthermore, since claims 12-15 and 17-20 variously depend from otherwise allowable respective claims 11 and 16 and further limit same, Applicants submit that all claims 11-20 are in condition for allowance.

With further regard to the assertions of the July 16, 2003 Office Action, Applicants note with regard to claims 2, 7, 12 and 17, that searchable data is not loaded into a billing data mart as alleged on numbered page 3 of the Office Action because there is no specific disclosure in Singer for data related to billing applications. Similarly, with regard to claims 3, 8, 13 and 18, Applicants submit that searchable data is not loaded into a usage data mart as alleged on numbered page 4 of the Office Action since Singer does not specifically disclose employing data for customer usage purposes. Finally with regard to claims 4, 9, 14 and 19, Singer does not disclose creating summary tables of the billing data mart and usage data mart. The virtual tables organized according to a plurality of business rules or an organization are not summary tables of actual data, since data is not actually stored in the virtual tables.

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that the present application, including claims 1-20, is in complete condition for issuance of a formal Notice of Allowance, and action to such effect is earnestly solicited. The Examiner is invited to telephone the undersigned at Examiner's convenience should only minor issues remain after consideration of this response in order to permit early resolution of the same.

Respectfully submitted,

DORITY & MANNING,
ATTORNEYS AT LAW, P.A.



Richard M. Moose

Richard M. Moose, Esquire
Reg. No. 31,226

Post Office Box 1449
Greenville, SC 29602
Telephone: (864) 271-1592
Facsimile: (864) 233-7342

October 16, 2003

Date